

**WE CLAIM AS OUR INVENTION:**

1. An electromagnetic brake assembly comprising:
  - a braking mechanism adapted to brake a movable surface, said braking mechanism being movable between a first position at which said braking mechanism is located so as to be adapted for braking engagement with the movable surface, and a second position, at which the braking mechanism is out of braking engagement with the movable surface;
  - an electromagnet that is energizable to bias said braking mechanism to one of said first and second positions; and
  - a power supply having a direct current source for supplying an interruptible direct current flow to energize said electromagnet, and having an arrangement for supplying an alternating current flow through the electromagnet with a successively decreasing amplitude characteristic after interruption of said direct current flow.
2. An electromagnetic brake assembly as claimed in claim 1 wherein said arrangement in said power supply for supplying said alternating current flow is an alternating current source, and wherein said power supply comprises a switch connected between said direct current source and said alternating current source, and said electromagnet, said switch being operable to interrupt the direct current flow to the electromagnet and to connect said alternating current source to the electromagnet.
3. An electromagnetic brake assembly as claimed in claim 1 wherein said arrangement for supplying alternating current to said electromagnet comprises a

capacitive element electrically connected to said direct current source in an electric current flowpath between said direct current source and said electromagnet.

4. A power supply for an electromagnet, said power supply comprising:

a direct current source adapted for connection to an electromagnet for supplying an interruptible direct current flow to energize the electromagnet; and

an arrangement adapted for connection to the electromagnet upon interruption of said direct current flow to supply an alternating current flow through the electromagnet having a successively decreasing amplitude characteristic.

5. A power supply as claimed in claim 4 wherein said arrangement for supplying said alternating current flow comprises an alternating current source, and wherein said power supply comprises a switch, connected to said direct current source and to said alternating current source, and adapted for connection to the electromagnet, said switch being operable to interrupt said direct current flow and to produce an electrical current flowpath from said alternating current source to the electromagnet.

6. A power supply as claimed in claim 5 wherein said alternating current source supplies said alternating current flow with a selectable frequency.

7. A power supply as claimed in claim 4 wherein said arrangement for supplying said alternating current flow comprises a capacitive element connected in parallel with said direct current source in an electrical current flowpath from said direct current source to the electromagnet.

8. A power supply as claimed in claim 7 wherein said capacitive element has a selectable capacitance.